REPORTS AND PROCEEDINGS

OF THE

COMMITTEE

OF THE

MADRAS SCHOOL OF INDUSTRIAL ARTS.

ESTABLISHED MAY 1850.

MADRAS:
PRINTED BY MESSRS. PHAROAH AND CO.
ATHENÆUM PRESS, MOUNT ROAD.
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REPORT UPON THE SCHOOL OF INDUSTRIAL ARTS,

MADRAS.

Prepared for the Committee by Dr. HUNTER, *and read 1st November* 1851.

PRESENT.

MAJOR COTTON,
J. D. BOURDILLON, Esq.
E. BALFOUR, Esq.
MAJOR BALFOUR, AND
REVEREND A. R. SYMONDS, M. A.

1. SOME of the facts which will be found embodied in this Report are of a most encouraging and satisfactory nature, as they prove beyond a doubt that this School has been appreciated by all classes of the community, that there are a good many of the elements of stability about it, and that the direction which has been given to the instructions has been of such a nature as to keep up the interest of the pupils, while it has stimulated many of them to real exertion. This is satisfactorily proved by the progress which has been made in drawing, wood engraving, etching and lithography. Also in the industrial department where modelling, casting in plaster of paris and pottery have been carried on with considerable success. The system of mutual instruction and co-operation has been strictly enforced, and the importance of a division of labor practically illustrated. Great pains were bestowed upon the early instruction of all the pupils, taking care to point out the necessity of understanding every lesson. As the elder pupils advanced they were taught the applica-

tion of drawing to one branch of engraving or lithography, and as soon as they had made sufficient progress, they were set to draw rudimentary lessons for the beginners and afterwards to engrave them. This system of instruction acted exceedingly well, as it enabled the pupils to study the arts from their rudiments up to their application to useful purposes; and allowed the whole of the pupils to have advantages which as far as I am informed, are not enjoyed in any other School of Arts in the world. In European countries wood engraving, etching and lithography are branches of the arts that are not taught in the Royal Academies or Schools of Design, hence the pupils are generally left to acquire the principles and practice of these important applications of their studies as they best can. (Heavy apprentice fees are also charged.) The consequence is that most of the pupils aim only at the very highest branches of art, and have no opportunity for studying the equally improving, but less ambitious branches, which are often however the most lucrative. I look upon this feature of our School as one of the best, and hope that hereafter we may be able to introduce the different kinds of printing also; as many of our lessons have been spoilt in the printing, and this is a department that requires both science and skilful manipulation to bring it to perfection.

2. The following is the distribution of the instructions. I superintend the branches of etching upon copper and modelling figures, flowers, and animals, from nature. I also take the general supervision of the School. Mr. Just Gantz teaches painting in water colors and drawing with pencil and pen. Mr. J. Fonceca, ornamental drawing, painting and sketching from still life, figures or ornaments designed in the School. Mr. H. J. Kouwen a prize pupil teaches the beginners landscape drawing and copying. P. Moorgesan Modelly, a very talented and persevering Native pupil, superintends the lithographic transfer department; and P. Soondrum, ano-

ther talented Native pupil, the wood engraving; one of our best wood engravers, Mr. J. Duarte got a situation as teacher of drawing in the Vepery Grammar School, where there are upwards of 40 pupils under instruction. He is assisted by another of our best Native pupils named C. Balakistnah. Mr. Chesterfield has the superintendence of the pottery and casting in plaster of paris. He is a good potter by trade, and has taken great pains to teach both the Native potters and pupils who have been under his instruction. The progress in this department has been exceedingly satisfactory. Another beneficial result which has followed the establishment of this School, has been the creating of a taste for the fine arts not only in Madras but in many other parts of the country, and this is extending very steadily thoughout Bengal, Bombay, Ceylon, and the Northwest Provinces. Several influential parties having already expressed their approbation of our labors; besides having applied for information regarding the internal economy of the School, in hopes of being able to establish others of a similar nature.

3. The most satisfactory proof that the School is appreciated by the classes for whose immediate benefit it was established is to be found in the fact, that between 250 and 300 pupils have been receiving instruction in the fine arts within the last 18 months, and the majority of them have willingly paid one Rupee a month for instruction. Soon after the School was opened, the influx of pupils became so great, that a sufficient number of masters could not be found capable of giving instruction; nor could large enough accommodation be provided in one School room. It was therefore found necessary to open a branch School in connection with the Vepery Grammar School, and subsequently another branch at the Military Male Orphan Asylum. These three Schools now support 7 East Indian and Native masters on monthly salaries of Rupees 70, Rupees 50, Rupees 30, Rupees 25, Rupees 10,

Rupees 8, and Rupees 7, in addition to which a good many of the pupils are now earning from 5 to 10 Rupees a month by copying pictures, drawing sketches and assisting to illustrate periodical literature, for which the School is creating a demand. Applications are also being frequently received for the services of young men who are capable of giving instruction in different branches of the fine arts.

4. In the industrial department there has been no lack of pupils, but it was found necessary to limit the number of them, as the space required is much greater than in the artistic department, and the means and appliances for keeping all of them regularly employed are still very inadequate. The interest which the pupils are now taking in their work is very satisfactory, and a great deal of what has already been manufactured is of such good quality that it meets with a ready sale; and very large and remunerative orders have been received, which it is found impossible to execute with the imperfect appliances and the limited space now at command. Several applications have been received for East Indian or Native potters to be sent to up country stations to give instruction in the manufacture of improved kinds of pottery. These requests cannot at present be satisfactorily complied with, but in time they may. Seven good Native potters, 8 lads from the Orphan Asylum in Black Town and about 20 East Indian, Hindoo and Mahomedan lads have been under instruction in the pottery department. Several of the Native potters have returned to their villages or homes and have been able to earn better pay than before they came for instruction. The system of paying the pupils from the Orphan Asylum and from Madras and Triplicane in proportion to their industry, has worked exceedingly well.

5. The mineral resources of India have been considerably developed by our labors, and those in the vicinity of Madras have been carefully examined and are now being turned to

useful and profitable account. The following are a few of the most valuable which appear to occur in such profusion that the supply may be considered as almost inexhaustible. Koalins or porcelain earths of every variety, quality and color, fine clays, fire clay, and common clays of every quality, felspar, baryta, selenite and some other glazing minerals in equal abundance; hyalite, rock crystal, milk quartz and agates; corundum, magnesite, and steatite, all of which may be employed in the manufacture of the very finest descriptions of pottery or porcelain. Of the metallic ores which are used in the glazing and coloring of pottery there is also great abundance, and some of the samples which have already been pretty extensively employed are excellent, as the ores of lead, manganese, antimony, chrome, copper and iron. Samples of a great many of the above minerals and metals have been carefully tested by Drs. Key, Mayer and Andrew Scott, and their working qualities have been repeatedly put to the proof by Major Smith at the Mint.

Professor Mayer and several other friends have borne testimony to the superior quality of the wares we have been manufacturing.

THE WANTS OF OUR SCHOOL.

6. In the artistic department we require the services of a young energetic artist who has been educated in one of the Royal Academies, or in a well-conducted provincial School of Design. He must be capable of giving instructions in drawing both from nature and still life, and be able to apply his knowledge to engraving or lithography. A good teacher of wood engraving is also required, as all our instructions in this department have been too much in the amateur line, having been entirely derived from books.

7. In the industrial department it is absolutely necessary that the services of a glaze-fire-man be procured for the pottery; as we have found by repeated failures that this is the

most delicate and important part of the manufacture, which cannot be perfected on the large scale without the assistance of a practised glaze-fire-man. All our labors have been carried on under considerable disadvantages but at no great expenditure of capital. A good many very remunerative orders have been received and fresh ones are coming in almost every day, which it is impossible to execute for a great length of time unless more extensive premises, some better descriptions of machinery, and a larger establishment can be provided.

8. In the event of Government not being able to procure the services of the above instructors, I would beg to suggest to the Committee that application be made for pecuniary assistance for a limited period, say 3 years, all the necessary arrangements being left for the consideration of the Committee. The present system of instruction ought unquestionably to be continued, as more value is attached to what has to be paid for; the probability is that if a better class of masters could be provided, the influx of pupils would go far to defray the additional expense and the facility for executing the large orders for pottery might soon place the School on an independent footing. The industrial department is likely to give employment to a number of the pupils in the artistic, and the latter will benefit the School by improving the designs and ornaments and enabling us to give publicity to our labors.

9. If arrangements could be made to relieve me from a part or from the whole of my medical duties, I should be most happy to devote my time and my best energies to the School, provided I could be secured against the loss of pay and allowances. I should be happy to give the pupils the use of my very valuable collection of engravings and artistic library, and to draw out a set of rules for the future guidance of the masters and the best mode of procuring studies for the use of the pupils.

10. The benefits which the School will confer are, providing an honest means of livelihood for a number of the best educated East Indian and Native lads, as well as remunerative labor for the lower orders. It will also lead to the development of the resources of the country and to the practical application of a number of them to useful and remunerative purposes. Many of the latter have already attracted great attention in Europe; and if proper means be adopted for carrying out the principles laid down in the above Report, many intelligent and skilled mechanics might be induced to come out to India, with the hope of getting remunerative employ. The encouragement which is being received from the leading members of Society in all parts of India is very satisfactory, as it proves that others would be willing to imitate our example if the means and facilities were available, and there is no reason why a Central School of this kind might not hereafter become an academy for the instruction of masters both of the fine arts and manufactures.

(Signed.) ALEX. HUNTER.

MADRAS.:
3rd November, 1851.

MADRAS, *March* 1852.

From

The Committee of the
Madras School of Industry.

To

SIR H. C. MONTGOMERY, BART.,
Chief Secretary to Government,
Fort St. George.

SIR,

SOME time ago, the Committee of the Madras School of Industry had the honor to wait on the Right Honorable the

Governor, by appointment, in order to represent to him the working of that Institution ; the results which it has hitherto achieved ; and its encouraging promise of further future usefulness ; and to state the assistance of which it stood in need, and which it was hoped the Government would afford. His Excellency listened with attention to what the Committee had to say ; examined with interest the specimens of the industrial products of the School which were laid before him, chiefly articles of useful and ornamental pottery, and was pleased to express an opinion that the School was well worthy of encouragement from Government, and his own cordial willingness to bring it favorably to the notice of the Honorable Court of Directors, with a view to such aid being given. He stated his wish, however, to have the wants of the School stated, definitely, in writing ; together with the grounds on which the application for assistance was based ; and, in conformity with the desire so declared, we have, now, the honor to address you with the following details of the origin, design, progress and requirements of the School of Industry, which we beg may be submitted for the information and for the orders of the Right Honorable the Governor in Council.

2. The Madras School of Industry owes its existence entirely to the active and disinterested exertions of Dr. Alexander Hunter. Soon after his appointment as Surgeon of the Black Town District, viz., on the 1st May 1850, Dr. Hunter opened a School of Arts, entirely at his own charge, with the liberal and enlightened design of creating among the Native population a taste for the humanizing culture of the fine arts. We shall have to recur to this Institution presently ; we only mention it here, as the parent forerunner of that one with which we now have to do more immediately. For the success which attended the School of Arts very soon put it into the mind of Dr. Hunter to enlarge his plans, by establising in connection with it, a " School of Industry" for giving instruc-

tion in various branches of the useful arts. This institution, also, was originally set on foot by Dr. Hunter at his own cost. But after a little while, finding himself under the necessity of obtaining some pecuniary help, to provide the necessary apparatus for the operation of the School, he appealed to the public, and so obtained a small contribution in aid of its funds; and at the same time he induced a number of gentlemen to consent to form themselves into a Committee, to assist him in its management.

3. The Madras School of Industry was opened on the 1st of June 1851, the object of its establishment being to afford to the rising generation of the country, the opportunity and the means of acquiring useful handicrafts; to improve the manufacture of various articles of domestic and daily use, now largely made in the country, but rudely and uncouthly; and, also, by developing the latent natural resources of the country, to create a local supply of several articles in general demand, which hitherto have been almost entirely imported. A further object was more immediately allied to that of the School of Arts; viz. to improve the taste of the Native public, and make them familiar with beauty of form and finish, in the articles daily in their hands and before their eyes.

4. The result of the experiment, even within the short period that has elapsed since the commencement of the School, has been such as to afford very encouraging hopes of its success and usefulness; and also to warrant us, as we believe, in bringing the Institution under the notice of Government with a view to its invigoration and enlargement.

5. A Report of the progress which the School of Industry has made, drawn up by Dr. Hunter, accompanies this letter, and to that we beg to refer the Government for detailed information as to its operations and results. We beg leave, however, to request their more particular attention to the following particulars.

1st. Since the opening of the School, 44 pupils have been under instruction, and at the present time it contains 19 pupils. Of the whole number 18 may be reported as having made creditable progress ; a few of the pupils who were making progress have left the School for other employ, as it could not pay them enough for their support.

2nd. The work upon which the pupils have been chiefly employed is pottery. Specimens of the several articles manufactured have already been submitted for the inspection of His Excellency the Governor. We beg to append to this letter a list, furnished by Dr. Hunter, showing the quantity of work executed, since the opening of the School, as well as the apparatus and stock which have been accumulated.

3rd. A ready sale has been found for many of the articles manufactured ; the orders received being indeed far greater than the School, with its present appliances, is able to meet.

4th. Various mineral products of this Presidency have been brought to bear in the manufactures effected ; such as porcelain earths, and clays, gypsum, quartz, felspar, granites, steatite, corundum, magnesite, galena, manganese, plumbago, the ores of iron, and colored earths. While these and other products, either brought to light, or discovered in new localities and in greater variety, by the same means, are likely to become articles of large and profitable export to England in their raw state; more particularly we may mention a fine quality of emery, and two or three qualities of corundum, chromate of iron, a rich ore of manganese, and another of antimony.

6th. Associated with the School of Industry is the other institution already adverted to, viz. the School of Arts. As the two Schools are intimately connected and mutually dependent, the success of the one materially contributing to the effectiveness of the other, it will be proper, in order to present

a complete view of the matter, to lay before Government some particulars respecting the School of Arts also.

7th. The School of Arts was opened, as already said, on the 1st of May 1850—the number of pupils who applied for admission was considerable; and in three or four months there were about 180 pupils who willingly paid one Rupee a month for instruction—since then, the numbers in Madras have gone on increasing, till there are, now, nearly 300 youths studying drawing, painting, or engraving in the original School, and in the two branch Schools, viz. at the Vepery Grammar School, and in the Military Male Orphan Asylum. The following masters, trained in the School, are now receiving monthly salaries as particularized opposite their names for teaching drawing in these establishments.

Mr. J. Duarte.....	25 Rupees.
Mr. H. J. Kouwen.....	8 „
C. Balakistnah.....	12 „
P. Soondrum.....	8 „
P. Mooroogasum.....	8 „
Rupees....	61

Mr. J. Duarte and Mr. Kouwen have also been employed in teaching in private families on good salaries, and a good many of the pupils have also made money by copying pictures and drawings.

8th. We trust that the foregoing particulars will be considered as sufficient to justify our present application for the aid of Government in behalf of these Schools—and we proceed therefore to state the kind of assistance which in our opinion will most effectually promote the objects of their establishment.

9th. We need scarcely observe that the supervision and direction of a well qualified person is indispensable to the

success of such Institutions as these. And to no one can the superintendence of these two Schools be so suitably committed as to the gentleman, by whom they were originated, and to whose care and exertions they owe all their progress so far. While occupied, however, with the medical care of a district it is manifestly impossible that Dr. Hunter should be able to give to these Institutions all the care and attention which they require to render them vigorous and efficient. The first boon, therefore, which we venture to solicit at the hands of Government in behalf of the Schools is, that Dr. Hunter should be relieved from a portion or the whole of his medical duties and allowed to devote his entire time and attention to their management; or at least a very much larger share of it than he can give them at present. And at the same time, we beg to suggest that some one or other of the Government Boards or bodies at the Presidency, should be appointed, somewhat in the capacity of "visitor," to exercise a general control and direction over the studies and operations of the two Schools.

10th. Another requisite to ensure success to these infant Institutions is the engagement of one or two superior teachers, to conduct the leading branches of the operations, and to instruct the pupils in the several details. We beg to specify more particularly a competent glaze-fire-man for the pottery department, and a good artist to instruct in drawing and designing. Respecting the necessity for the services of instructors of both these descriptions and especially of a glaze-fire-man, we beg to refer to paras. 6 and 7 of the accompanying Report. The list appended also shows forcibly the want of such a workman as the latter, as it exhibits a large quantity of ware in the biscuit form, which cannot be perfected without such aid. The successful glazing of ware requires a practical skill, for the want of which no care and attention can make up. The cost of bringing out two such persons from England would not be less than 500 Rupees, and a lower salary than

250 Rupees per mensem to the former, and 350 Rupees to the latter, would not secure *efficient* men. For this purpose, therefore, we would solicit a monthly grant of Rupees 600, for a limited period, perhaps five years. With two such persons provided for the Schools, we are authorized by Dr. Hunter to state to Government, that there is no reason to doubt that sufficient remunerative work could be accomplished, to meet the other pecuniary liabilities of the Institutions.

11th. Lastly, a small capital is required to furnish the Schools with such materials and appliances as would put them upon a satisfactory footing, and enable them efficiently to carry out their objects. For this purpose we venture to apply for a grant from Government of Rs 6,000, to be laid out in procuring machinery, models, casts, and studies from England.

12th. In submitting this request for aid, we will briefly state the advantages which we think may reasonably be expected to result from these Schools.

We believe that new and feasible openings for employment will be placed within the reach of numbers of young men who now look to nothing but the vague hope of obtaining situations as writers in the various Government offices; and that the resources of European science, brought to bear upon the excellent materials abounding in this country, will, in time, effect a great improvement of the Native manufactures, and spread the blessings of superior knowledge and skill throughout all those districts from which pupils may have been gathered together.

We believe, moreover, that the same Institutions, which will thus furnish the opportunity, will also tend to create a spirit of enterprize, and operate beneficially on the young men of the country by stimulating them to enter upon useful and independent fields of exertion. We believe that, as Southern India possesses, unquestionably, vast mineral resources, as yet not at all or only very partially developed, these Schools will

be the means both of discovering such resources and bringing them to bear on the local manufacture of articles, the supply of which at present is altogether dependent on importation, and in the improvement of other articles which are made on the spot, but of a very inferior character.

We believe, also, that there are substantial grounds for anticipating that, as the mineral resources of India become developed, and the impediments to traffic now existing in the badness of the roads, are gradually removed, no inconsiderable exportation is likely to result from the abundance and facility of supply, of articles extensively used in the English manufactures.

13th. Should these expectations be realized, wholly or in part, we need scarcely observe that vast benefit will assuredly accrue to the people of this country, through the opening of new and extensive fields for the employment of labour, and the acquisition of wealth ; and increasing wealth invariably brings in its train increase of civilization and enlightenment. Nor will the people alone benefit ; for such is the framework of the social system in this country, that no increased demand can arise for the products of the soil, (and such increased demand would of necessity be one of the first effects of increased employment for labour) without *directly* augmenting the revenue of the state, in a degree unknown in most other countries. And even apart from any direct advantages to be gained by Government, we are bold to assume that if this project, even looked at almost solely as an educational one, commends itself to the judgment of the Right Honorable the Governor in Council, as being calculated to advance the happiness and well being of the people, it will not be thought unworthy of the aid and encouragement of the Government.

14th. To prevent all misconception we beg explicitly to state that we have no expectation that the Institutions *as*

such will prove so far remunerative as to become independent of extraneous support. We do not anticipate that these Institutions will be themselves money-making establishments, but we do anticipate that they will show how money is to be made. The legitimate province of these Schools will be in the first place to experimentalize ; and then, when the experiment has succeeded, not to monopolize the manufacture so produced, but leaving it to be taken up by private capital and private enterprize, to pass on to some other branch of manufacture. In a word, we regard these Institutions as likely to become useful pioneers, pointing out the road to various fields of remunerative labour, clearing away the obstacles that obstruct it, and, by leading the way, encouraging a class, too prone to regard handicraft occupations as degrading, to enter upon a sphere of honorable, manly, useful, and profitable exertion.

We have the honor to be,

Sir,

Your most obedient Servants,

(Signed) J. D. BOURDILLON,
„ A. R. SYMONDS,
„ J. T. SMITH,
„ F. C. COTTON,
„ G. BALFOUR,
„ EDWARD ELLIOT,
„ EDWARD BALFOUR.

MADRAS,
March, 1852.

APPENDIX.

List of Ware (made and sold), Machinery, Moulds, and Raw Materials on the premises.

	No.
Flower Pots, biscuit.	108
Do. glazed.	36
Ornamental Goglets, biscuit.	400
Do. do. glazed.	60
Plain Goglets, biscuit.	360
Do. glazed.	24
Butter Coolers, biscuit.	216
Do. glazed.	72
Jars, biscuit.	72
Do. glazed.	420
Common Dishes, biscuit.	12
Do. glazed.	24
Stands, biscuit.	12
Do. glazed.	12
Plates, biscuit.	12
Do. glazed.	24
Funnels, biscuit.	24
Do. glazed.	36
Dogs, biscuit.	60
Do. glazed.	48
Ornamental Jugs, biscuit.	24
Do. glazed.	24
Flower Vases, biscuit.	12
Do. glazed.	36
Sugar Basins, biscuit.	12
Do. glazed.	18
Toys, biscuit.	48
Do. glazed.	36
Figures of Animals.	12
Bread Pans, biscuit.	3
Do. glazed.	1
Retorts, biscuit.	7
Do. smeared.	7
Spittoons, biscuit.	14
Do. glazed.	10
Cheese Coolers, biscuit.	5
Do. glazed.	1
Milk Jugs, biscuit.	12
Do. glazed	24
Water Jugs, biscuit.	12
Do. glazed.	24
Ornamental Cups, biscuit.	24
Do. glazed.	24
Crucibles, biscuit.	48
Do. glazed.	48

	No.
Chemical Saucers, biscuit.	120
Do. glazed.	24
Bottles, biscuit.	48
Do. glazed.	36
Common Cups, biscuit.	48
Do. glazed.	36
Flower Horns, biscuit.	36
Do. glazed.	24
Washing Pans, biscuit.	4
Do. glazed.	8
Powder Boxes, biscuit.	6
Do. glazed.	18
Beer Coolers, biscuit.	5
Do. glazed.	250
Seggars.	200
Do. expended, broken and worn out.	300
Do.	

Busts, Figures, &c.

Sleeping Children.	8
Busts, life size.	9
Do. small.	72
Statues of the Queen.	2
European Figures.	3
Native do.	7
Statue of Venus.	1
Medallions.	60
Quarries.	36

(Note.—A good deal of the above Ware has been spoilt in attempting to perfect the glazes.)

Ware sold.

Flower Pots, biscuit.	24
Do. glazed.	18
White Ornamental Goglets, biscuit	84
Do. do. do. glazed.	1
Colored do. do. biscuit.	36
Do. do. do. glazed.	6
Plain Goglets, biscuit.	36
Do. glazed.	6
Butter Coolers, biscuit.	19
Do. glazed.	8

	No.
Milk Jugs, biscuit.	8
Do. large, glazed.	20
Do. small, biscuit.	20
Do. do. glazed.	18
Toys, biscuit.	18
Toys, glazed.	24
Common Cups, biscuit.	6
Do. glazed.	96
Sleeping Children.	8
Ornamental Cups.	12
Flower Horns.	20
Cheese Coolers.	2
Large Jars, glazed.	56
Small do. glazed.	147
Flower Vases.	8
Statue of the Queen.	1
Small Busts.	9
Dogs.	36
Medallions.	12
Funnels.	17
Basins.	8
Bottles.	6
Beakers.	2
Chemical Saucers.	14
Model of a Furnace.	1
Powder Boxes.	3
Beer Coolers.	4

(A good deal of the above Ware is ordered, or has still to be paid for). The sums collected up to the present date, February 1st, 1852.

By Sales are Rupees.	337	12	0
Still due.....	59	4	0
Total..	397	0	0

(Note.—A good deal of Ware has been sent in exchange for raw materials.)

List of Moulds belonging to the Establishment.

		No.
Goglet	Moulds,	12
Bust	do.	16
Butter Cooler	do.	4
Jug	do.	8
Flower Pot	do.	3
Do. Vase	do.	2
Chemical Apparatus	do.	10
Encaustic Tile	do.	12
Cheese Cooler	do.	1
Toy	do.	5
Figure (of Animals)	do.	11
Beer Cooler	do.	2
Statue	Moulds.	8
Medallion	do.	15
Flower Horn	do.	1
Bread Basket	do.	1
Jars		6
Colossal Hands and Feet	do.	4
Finger	do.	4
Jelly	do.	4
Tea Pot	do.	1
Phrenological Head	do.	2
Mask	do.	4
Bust (size of life)	do.	6
Basin	do.	4
Dish	do.	4
Medallion (size of life)	do.	2
Picture Frame	do.	2
Porcelain Picture	do.	4
Bracket	do.	4
Milk Pans	do.	3
Native Figure	do.	2
European do.	do.	1
Exhibition Plate	do.	1
Large Ornamental Slab	do.	2
Small Leaf Pattern do.	do.	1

Machinery, &c. &c. belonging to the Establishment.

	No.
Working Benches.	9
Forms.	12
Whirlers.	14
Cast Iron Boilers.	2
Hand Mills.	10
Glaze do.	1
Flint do.	1
Iron Wedges.	3
English Thrower's Wheel.	1
Native do. do.	1
Sieves.	19
Seggars.	250
Barrels.	14
Momatties.	2
Crushing Mills.	2
Rattan Sieves.	3
Iron Drawing Rod.	1
Do. Rake.	1
Seggar Drums.	5
Do. Bench.	1
Iron Crucible.	1
Do. Knives.	15
Do. Levers.	2
Sifting Boxes.	4
Straps.	6

	No.		No.
Plaster Drying Boxes.	6	Feet Mango Planks.	78
Cog Wheels.	3	Iron Ladles.	4
Washing Vats.	3	Bandy and a pair of Bullocks.	1
Slip Kilns.	3	Ton Arcot Porcelain Clay.	1
Stamping Machine.	1	Do. Ball Clay.	2
Slip Vats.	3	Do. Bimlipatam Kaolin	1
Pairs Wooden Cylinders.	2	Do. Fire Clay.	3
Iron Stamps.	4	Do. Plaster of Paris.	2½
Ware Stands.	2	Do. do. White.	½
Spare Iron Axletrees.	2	Do. Corundum.	20
Stone Slabs.	8	Do. Soapstone.	10
Iron Bars.	60	Do. Pegmatite.	2
Pair Blast Bellows.	1	Do. Clay Iron Stone.	1
Thermantidote do.	1	Cwts. Manganese.	8

The only point upon which definite information cannot be given is the extent of the orders—a good many of these would depend upon the progress made in the firing and glazing departments. Several remunerative ones have been refused and advances of money have been returned from the inability to execute the work on so large a scale—about Rupees 100 have to be deducted from the expenditure and the same from the receipts as money that has been returned. Orders to the amount of 4,000 or 5,000 Rupees could now be taken up; which could not be executed with our present establishment in less than 3 years.

ALEX. HUNTER.

Note.—The value of the Moulds in the foregoing List is stated at fully 632 Rupees; that of the Tables and Benches 360, and that of the Machinery and Materials 1,000; Total nearly 2,000 Rupees.

MADRAS,
March, 1852.

PUBLIC DEPARTMENT,

No. 1164.

Extract from a Letter from the Honorable the Court of Directors dated 29th September, No. 29 of 1852.

Extract from the Minutes of Consultation dated 18th December 1852.

Letter dated 10*th August, (No.* 17*)* 1850, p. 12.

Transmitting Reports by Dr. Hunter on the experiments carried on under his Superintendence for the improvement of Indian Pottery at Chingleput. Negociations were issued for the transfer of the Machines, Moulds, &c. in use there, to Messrs. Griffiths and Co. who were desirous of establishing a Pottery at Madras. These however having failed, the plan has been made over to the Directors of the Male and Female Orphan Asylums in Black Town, in which it was desired to introduce the Manufacture for the employment and instruction of the inmates.

65. The progress made by Dr. Hunter in the improvement of the manufacture must be regarded as very satisfactory and there appear to be grounds for believing that even porcelain might be produced of a high degree of excellence. It seems to be intended that the works at the Asylums shall be confined to the production of the ordinary kinds of pottery for which a ready sale is found at Madras and the neighbourhood,

15. A copy of this para. will be furnished to Dr. Hunter with a request that he will report what further progress has been made on the experiments carried on under his Superintendence for the improvement of Indian Pottery at the Presidency.

and we think that further attempts may still be made to produce the finer wares for which such abundant materials are found to exist and in the manufacture of which up to a certain extent, Dr. Hunter has been so successful. We desire to be kept informed of your further proceedings with reference to a branch of manufacture which seems peculiarly well suited to the people of your Presidency as being easy of acquirement and as requiring means and appliances involving but little expense.

(True Extracts.)

H. C. MONTGOMERY,

Chief Secretary.

To

A. HUNTER, Esq., M. D.

PUBLIC DEPARTMENT,

No. 1168.

No. 32 OF 1852.

OUR GOVERNOR IN COUNCIL,

AT FORT ST. GEORGE.

Extract from the Minutes of Consultation, dated 21st December 1852.

1st Letter dated 4th May (No. 14) 1852.

Transmitting Copy of a letter from the Committee of the Madras School of Industry, established by Dr. Hunter, in which an account is given of the origin, design, progress, and requirements of the above School, and of the School of Arts also set on foot by Dr. Hunter, and recommending that that Officer be relieved from his Medical duties in order that he may be able to give his whole time to the superintendence of the above Institutions and that the Court's sanction be given to a donation of Rs. 6,000 for providing the necessary materials and appliances for the Schools, and to a monthly grant of Rs. 600 for the period of five years for the special purpose of paying a "competent "glaze Fireman for "the Pottery Depart- "ment and a good "Artist to instruct in "drawing and de- "signing" both of which are considered essential, and must be procured from England at liberal Salaries.

Para. 1. We have already noticed with approbation the efforts made by Dr. Hunter to improve the manufacture of Pottery, at your Presidency, and we now learn with much satisfaction the formation by that Gentleman of the Institutions here brought to our notice, which "whether regarded "as a means of diffusing "science, and imparting a "taste for the refinements, "and amenities of life "amongst the people, or of "affording them scope for "the exercise of their talents "to the improvement of "their condition in life, or "of developing the great "resources of the Country, "Mineral and Vegetable, "and the other valuable "productions which are "now known to exist in the "Madras territory," we agree with you in considering to be highly "deserving of the patronage, and support of the State."

2d. Resolved that a copy of this despatch be forwarded to the Committee of the Madras School of Industry with reference to Extract Minutes of Consultation (No. 371) dated 24th April 1852, and that they be requested to furnish for communication to the Honorable Court of Directors, the further information required in para 2.

3d. Under the authority here conveyed, the sum of Rupees 6,000 will be disbursed to the Committee for the purpose indicated in para. 11 of their Report dated 8th March last.

2. We accordingly authorise you to make a grant of Rupees 6,000 for the purpose of purchasing the machinery casts, and models required for the Schools, and we shall be prepared to sanction a moderate monthly contribution for a limited time on being furnished with further information as to the expenses of the Institution, and as to the prospects of their eventually becoming independent of Government assistance, this latter point being one which we think indispensable, while at the same time the Committee's remarks respecting it are not encouraging.

3. We shall in the meantime make enquiries as to the terms on which an artist and a glaze fireman, who are stated to be specially required could be induced to go out to your Presidency for a limited period.

4. We are unable to comply with your request that Dr. Hunter may be relieved from Medical duty, and permitted to devote his attention exclusively to the management of these Schools; while however we cannot consent to the entire withdrawal of this Officer from the duties of his profession, we trust that these Institutions may continue to have the benefit of his supervision and control to such an extent as may be compatible with the discharge of his other duties.

We are,
Your loving friends,
(Signed) J. W. HOGG,
„ RUSSELL ELLICE,
And other Directors.

LONDON, *3rd November* 1852.

(True Copy and Extract.)
H. C. MONTGOMERY,
Chief Secretary.

To
THE COMMITTEE OF THE
MADRAS SCHOOL OF INDUSTRY.

July 1853.

THIRD ANNUAL REPORT UPON THE MADRAS SCHOOL OF INDUSTRIAL ARTS.

Changes in the School.

Some important changes have taken place in the Madras School of Industrial Arts during the past year.

Entirely remodelled.

One of these has been the entire remodelling of the School so as to adapt the system of instruction to the wants of the different classes of the pupils, who were becoming so numerous that accommodation could not be provided for all in one building. It was ascertained that the monthly charge of 1 Rupee was too high, and that if it could be reduced, numbers of Native pupils who have made some progress in drawing, would avail themselves of the instructions. At first the majority of pupils consisted of East Indian lads, Europeans and Armenians, none of whom looked to the arts as offering them any adequate prospects of gaining a livelihood, the consequence was, that as soon as they were old enough to obtain situations, this class of pupils invariably left the School and not one of them appears to have had difficulty in getting a situation as a writer, on salaries varying from 20 to 60 Rupees a month. Upwards of 70 pupils of this class have thus been tempted to leave the School within the last $2\frac{1}{2}$ years, and few of them continue to practice the arts, although several had shown a decided natural turn for drawing and considerable talent in designing.

Monthly charge of 1 Rupee too high.

East Indian pupils tempted to seek other employ.

Native pupils too poor to pay for instruction and to purchase materials.

Numerous petitions were received from Natives, who stated that they could not afford to pay 1 Rupee monthly for artistic instruction, besides purchasing drawing materials; at the same time there was an increased demand for qualified instructors, and orders for pictures, rudimentary lessons, and copies, were so numerous, both from Madras and other localities, that it was found impossible to execute them. Mr. Just Gantz, the head master, was tempted to leave the School, by the offer of a more lucrative situation as teacher of drawing in the Military Male Orphan Asylum. He also procured employment in private families, and got orders for different kinds of artistic work of a remunerative nature. Mr. Fonçeca, the 2nd master, obtained a good situation as writer in the Commissary General's Office, besides receiving several orders for pictures.

Increased demand for studies and pictures.

East Indian masters tempted to leave the School.

Mr. H. J. Kouwen, the 3rd master, got employment as teacher of drawing in a private family, and as an Organist and teacher of music, but his health soon broke down from the overtaxing of his energies.

Pupils find no difficulty in getting comfortably provided for as writers.

Mr. J. Duarte and P. Soondrum, our wood engravers, both obtained situations as writers in Government Offices. They still keep up drawing and engraving at their leisure hours, but their services as well as those of the other masters have been lost to the School, and 15 East Indian and about 10 Native pupils, who had made considerable progress in different branches of art, have lately given up attending the School in consequence of having got comfortably provided for elsewhere.

Native pupils have made the most steady progress and have been the most regular in their attendance.

The Native pupils have not enjoyed the same facilities for obtaining employment as the East Indian pupils, and the consequence has been, that more steady progress has been

observed, particularly amongst those of advanced years. A good many of this class of pupils have devoted the whole of their time and attention to drawing, and some have spent from 8 to 10 hours daily in the School. The East Indian pupils have shown the greatest amount of originality, freedom, and boldness in designing and copying.

East Indian pupils have most original talent.

The Natives have excelled in precision of touch, clearness and accuracy of outline (which may in some measure be attributed to their early familiarity with the practice of drawing mathematical patterns on the floors of their houses) and by their patience and industry they have acquired a more thorough knowledge of the rudiments of arts.

Native pupils excel by their industry and accuracy.

The total number of pupils who have received artistic instruction in the School since its establishment in May 1850 has been 472—of this number a good many have been able to procure remunerative situations from their proficiency in drawing.

Number of artistic pupils 472.

Two East Indian pupils have been employed as teachers of drawing in Schools.

J. Duarte, and J. Wilkins.

Three have been engaged as teachers in private families.

H. Duarte. H. J. Kouwen, and Satoor Lazar.

One has got a lucrative situation as draftsman in the Chief Engineer's Office.

A. Barren, on 70 Rs.

Another has got employment as surveyor and draftsman with the force in Burmah, and reports that his pencil is kept in full employ.

C. Dinger, on 70 Rs.

Two more have got artistic situations in the Northern Division as surveyors and draftsmen.

A. Colquhoun, and G. Ross, each on 70 Rs.

Another has been engaged by Mr. Deschamps, cabinet maker.

T. Tod.

One pupil had temporary employ in the Horticultural Society's Gardens.

J. Binny.

R. H. Dupuy, on 20 Rs.

One pupil has been employed in the School on a monthly salary as a careful copyist and pen draftsman.

Fitzgerald.

One has got a situation as a carver in stone and marble.

T. Stracey.

Another as a chaser and engraver in metals.

Daguerreotype and Talbotype processes, learnt by Mr. Holt.

An elderly European student, Mr. Holt, has acquired the arts of taking daguerreotype portraits and talbotype views, by which means he has been enabled to earn a good deal of money. He has lately gone on a tour to Bangalore, Mysore, the Hills and Trichinopoly, and will be engaged in taking talbotype views of some of the antiquities of India for the use of the School. Mr. Holt received a few instructions on the talbotype process, and got some of his apparatus made in the Madras School of Arts, but has learnt the daguerreotype process entirely from books.

Native pupils who have got artistic employ, P. Moorgasen.

Of the Native pupils P. Moorgasen has been the most diligent and has been employed as a teacher in our School, besides having had a good deal of remunerative work to execute in the way of botanical drawing for Dr. Cleghorn, for the Medical College, and occasionally for private individuals.

C. Balakistnah.

Another Native pupil who has made great progress, and has shown a strong desire for improvement in the art of oil painting, is Balakistnah, who is employed as a teacher of drawing in two public Schools, on salaries of Rs. 25 and Rs. 18.

M. Devaraujoo.

A third Native pupil has been engaged as a draftsman by Mr. P. Orr, silversmith.

Native pupils selected as good copyists. S. Chengalvaroy, A. Rajahgopaul, C. Sashachellum, C.

The Native pupils named in the margin have been selected as the best qualified to execute copies of the prize designs, and of

R. Ramasawmy and Iasawmy, N. Cundasawmy, M. Cundasawmy, S. Narrainsawmy, B. Soobrawmania Iyer, C. Mooroogasen, Vencaturamunum, M. Davarojooloo.

the studies in the School, for which there is now a demand in several parts of India.

Designs sent to London and Bombay, in demand also elsewhere qualified pupils required in Bombay, Scinde, Ceylon, Roorkee, and other places.

Parcels and tin boxes of these designs have been sent from time to time to Sir Jamsetjee Jeejeebhoy, and to Dr. J. Forbes Royle, at the India House, to show the progress made by the pupils. Applications for drawings have also been received from other quarters, but the greatest demand has been for pupils from our School qualified to impart instruction in Schools of Art or Industry proposed to be established at Roorkee, Jaffna, Trincomallee, Salem, Mangalore, Bombay and Scinde. None of the pupils however are sufficiently advanced to be capable of taking the management of such establishments.

Pupils lately employed at their own houses.

For some months past most of the labor of the pupils has been carried on at their own houses, all the masters except one having obtained employment elsewhere, and my time having been so fully occupied with the duties of the District, that the Medical Board desired the School might be closed, until I could be relieved from a portion or the whole of my Medical duties.

School temporarily closed.

System of instruction lately improved; rudimentary instruction more strictly enforced.

The system of instruction in the School has lately been improved by confining the pupils to progressive lessons in the rudiments of a few branches, as Geometrical and Architectural drawing, ornamental designing from natural plants, botanical and landscape drawing, desultory efforts in the higher branches of art have been discouraged. The system of offering small monthly prizes for original designs from particular plants, has worked exceedingly well and has brought many of our

Designing from nature and botanical drawing encouraged.

Monthly prizes offered for original designs.

early pupils into the field as competitors, besides calling forth a great amount of Native artistic talent of which we had no knowledge—as a proof of this 62 large designs from plants were forwarded to the School within 6 weeks from the time of advertising, three prizes of Rs. 10, Rs. 7, and Rs. 4, for the best productions. On another occasion, when two prizes of Rs. 10, and Rs. 7, were advertised for the best collection of designs drawn by Native women in front of their doors, nearly 400 patterns were forwarded, and many of them were remarkable for careful and most difficult geometrical drawings as also for taste in the arrangement of the colors.

Large bold designs will be forwarded hereafter.

Vol. II. of Native patterns will probably be ready in a month.

Amount earned by the Artistic pupils.

The amount earned monthly by the pupils who have obtained situations from their proficiency in drawing is Rs. 483-8-0, at one time it amounted to Rs. 592-8-0, but some of the pupils have lost the situations which had been procured for them. The above sum does not include the amount realised by Mr. Holt for Daguerreotypes, which at one time was about 200 Rupees a month. Nor the monthly sum of Rs. 241-8, earned by masters. These facts are sufficient to prove that the arts are beginning to be appreciated in India, and if there were proper facilities for educating pupils, they would have no difficulty in obtaining remunerative situations.

Industrial labors.

The results of our labors in the industrial department have been satisfactory, though a great deal more might have been accomplished had skilled artisans and more ample funds been available. It may be as well to mention that this branch of the School was commenced for the purpose of trying to point out the practical application to the arts and manufactures of a few of the raw materials which are abundant and cheap in India.

Industrial department, an experiment, only small sums of money called for.

It was not expected that with the small sum of about 2,000 Rupees raised for this branch, that any thing like an efficient manufactory could be set on foot.

The Committee therefore resolved, that as soon as any branch of industry promised to be lucrative, or held out a fair prospect of being taken up by private enterprize, as a manufacture, encouragement should be given to the public or to private individuals to enter the field. Three branches of Industry which have been taught in our School have thus been taken up, and each promises to be remunerative.

Paper, attempts to improve.

The first branch of industry which was attempted was the improvement of the paper for the use of the pupils. (Experiments had been made

In the Jails.

in the Jails at Cuddapah and Chingleput to manufacture paper out of some of the fibrous substances used for cordage in different parts of the country. Some of the papers which were made by hand were tough, strong, and of good quality for sketching upon, others were intended for mounting drawings and answered well for scrap books.) It was hoped that by a little care and attention, papers of a superior quality might be turned out in Madras. The experiment was accordingly made at the Monegar Choultry, but it was found that the pupils did not take willingly to the work, and that it was more economical to employ skilled workmen for the manufacture, than to commence teaching pupils; some good papers were made for sketching purposes, from mixtures of aloe, plantain and gunny fibres, but two or three serious defects were discovered in the Native process which were pointed out to the leading Native paper makers in Madras.

Teaching pupils a tedious and expensive way of making paper.

Skilled Native workmen employed.

Defects in Native process pointed out—not since remedied.

Manufacture taken up by C. V. Cunniah Chetty, and some European steam machinery applied.

The experiments were taken up by a wealthy Native who has since made improvements in the manufacture, and has purchased and erected European machinery which enables the workmen to turn out a better description of paper at a cheaper rate. The European methods of sifting and bleaching the pulp have not yet been introduced. Samples of the papers above alluded to and of a few other kinds, with the materials used in their manufacture have been forwarded to the Government Museum and duplicates will be sent to the Museums at Kew and Edinburgh.

Specimens of papers forwarded, others called for in Edinburgh and London.

Whilst these experiments to improve the manufacture of paper were being conducted, the raw materials employed in their preparation attracted the attention of the Mercantile community, as being well adapted for cordage. Specimens of a good many fibrous substances were first carefully prepared at the Monegar Choultry; the process was then introduced as a means of occupying a few of the prisoners in Her Majesty's Jail and the House of Correction. Good, clean, and strong fibres were prepared and a few samples of string and rope were made from them both by machinery and by hand spinning.

Fibrous substances attracted attention.

Fibres of Aloe, Agave, Marool, Plantain, and Pine Apple, prepared at Monegar Choultry and two Jails.

Rope and string submitted to Military Board.

The samples were submitted to the Military Board for trial and were reported upon favorably, though the aloe fibre was the only one that approached the strength of the European and Russian hemp.

Agave or large Aloe the strongest.

Prisoners, paupers and lunatics employed on the work.

The rope and string were made chiefly by blind paupers in the Monegar Choultry and idiots in the two Lunatic Asylums.

The labor was not objected to by the prisoners, paupers, idiots or lunatics, and in most instances it was cheerfully resorted to.

Manufacture now carried on at Manantoddy, and in the Northern Division for the English market.

P. Thorpe.

The manufacture of these fibres has since been extensively carried on at Manantoddy where one of our pupils procured a good situation for teaching the process to some of the coolies on a coffee estate, where the aloe and pine apple grow abundantly. The process has also been extensively carried on in the Northern Division, and large consignments of plantain and aloe fibre are now being annually shipped for the English market. Some of the samples have been of good quality, but others appear to have been very carelessly prepared. (A patent has lately been taken out in England for a process of cleaning fibres, very similar to that described in the Indian Journal of Arts.)

See Part 2, for July 1850 and part 5.

Best specimens prepared and shipped by Mr. V. Passanha.

The best specimens of plantain and aloe fibres that have been shipped for the English market have been prepared at Royapooram by Mr. V. Passanha.

Manufacture of pottery attempted in MaleOrphan Asylum.

The next branch of industry which was attempted in the School was the manufacture of pottery. This had been commenced in the Male Orphan Asylum in Town, but as the boys in that Institution were too young and feeble to carry on all the laborious process of pottery, and the experiments were of too precarious a nature to be paid for entirely out of the funds of that Institution, it was thought advisable to remove the boys from the Asylum to the School of Industrial Arts, by which means they avoided a good deal of the severe coolie labor, and exposure to the sun. Considerable progress was made by several pupils in the manufacture of bricks,

A failure from the boys being too young.

Good bricks, tiles, and draining pipes made.

tiles, and draining pipes which were turned out in large quantities, and with considerable rapidity, with a machine kindly lent to the School for a time by G. Wellington, Esq.

48 pupils and 8 Native potters in Industrial department.

48 pupils and 8 Native potters have been taught to make improved kinds of pottery, by the European mode of pressing into hollow moulds of plaster of Paris. Articles of a great many shapes and variously ornamented have thus been turned out, and the demand for many of them has been considerable.

3 Native potters and 2 East Indian lads taught to throw.

Three Native potters and two pupils were also taught to make jars, cups and bowls, on the European throwing wheel, but from the want of an experienced workman to teach this department, the work could not be made true, regular, or of sizes. The

Orders for jars extensive.

orders in this department have been far the most extensive and would prove highly remunerative if the work could be turned out with rapidity, regularity and certainty, but unfortunately a great deal which was good after the first, or biscuit firing, has been completely spoilt in many of our attempts to perfect the glazing.

Glazing cannot be performed with any certainty from the want of an experienced fireman.

Several furnaces full of glazed ware have been turned out, and have found an immediate market, but at least 3 glazed articles have been spoilt for every one perfected, and this has led to much vexation, loss and disappointment. The

Glazing has been learnt from books.

whole process of glazing has been worked out from books, by an intelligent European, M. Chesterfield, of the 2nd European Light Infantry, who was formerly a hollow-ware presser in one of the Staffordshire potteries.

Brick, tile and pipe making perfected.

A good European brick, tile, and pipe maker, named T. Barton, from the 3rd Battalion Artillery, was also employed for some time as an instruc-

tor in the School, but as there was no demand for improved kinds of building and draining materials in Madras, he was allowed to proceed to Bangalore, his services having been applied for by General Cubbon to explore the Mysore District, and to teach the Natives to make better bricks and tiles.

European Teacher now employed at Bangalore.

Application for assistance in commencing European manufacture of pottery.

An intelligent Native, named Arnachellum Moodelly, who commenced pottery on his own account, having intimated his intention of engaging on a monthly salary such well trained pupils as could be spared from the industrial department of the School, it was resolved that every assistance should be afforded. Accordingly the moulds for pottery, most of the machinery, and the best of the East Indian pupils from the School were lent as an assistance.

Assistance and encouragement given.

The European Superintendent was also permitted to give instructions; at the same time Arnachellum Moodelly was given distinctly to understand, that the articles were only lent for a time, and very faint hopes were held out of his being able to perfect the process of glazing without the assistance of a properly qualified European. This experiment has now been carried on for six months, and though a great deal has been taught, and very satisfactory progress has been made in this establishment, still no progress has been made in perfecting the glazes, and it is evident that it is a waste of money to carry on the manufacture of such articles as require to be glazed without adequate assistance.

Caution given.

Experiment tried for six months.

Glazing not perfected on a large scale.

Natives have greater facilities for procuring raw materials and fuel.

It has been ascertained that the Natives can procure clays, materials and fuel at very much cheaper rates than Europeans pay for the same, it is therefore evident that experiments of this kind are likely to be more successfully and profitably carried

on by Natives, at the same time it must be borne in mind that no great improvements in the quality or forms of the wares, would be introduced unless pottery continued to be kept up as one of the branches of industrial instruction in the School.

Scientific and Artistic instruction must be kept up in the School.

The same remarks would apply with equal force to any branch of artistic industry that might be attempted.

The manufactures should be left to private enterprize.

An intelligent Mussulman also applied for assistance to enable him to improve the Native pottery, but the services of the European, the best pupils, the moulds and machinery had already been lent to another applicant, who had previously expended a good deal of money in the erection of sheds, furnaces, and machinery.

Asoph Jung Bahadoor anxious to improve the Native pottery.

Numerous applications have been received from different parts of India, for pupils qualified to impart instructions in pottery, and in the manufacture of good building materials, but eight of the best East Indian pupils were tempted to go to England by the offer of good wages as seamen, and all the Native potters who had come to the School on monthly wages or for instruction, had returned to their villages, with the exception of two who were engaged for work in Madras.

10 Native potters have been in employ, 6 on wages, 4 as substitutes temporarily, and one as a Prisoner.

Another satisfactory result of our industrial labors, has been the discovery of a variety of raw materials from the vegetable and mineral kingdoms of nature, suited for employment in the arts and manufactures; of these the most important have been good woods for engraving, carving, decorative, and useful purposes; a few vegetable and a great variety of mineral colors. Extensive beds of clay and materials for every variety of porcelain, pottery, glass and enamel; several materials in great abundance, marbles, lithographic stones and grind

Raw materials discovered.

stones, of every quality, gypsums, selenites, and cement stones; and lastly corundum and emery in a number of different localities; these two minerals are now coming into extensive use for grinding and polishing machinery, metals and plate glass; large and remunerative orders have been received for them, but one or two other substances of no value are so easily mistaken for them that care and scientific knowledge are required in their selection.

Expenses of School in three years.

A condensed summary of receipts and disbursements on account of the School may now be given, as they go far to prove, that with a little fostering and encouragement, industry and the arts would prove as remunerative in India as in other countries.

CONTRIBUTIONS FROM THE PUBLIC.

	Rs.	A.	P.
Since May 1850, - - - - -	5,014	0	0
Paid by pupils for instruction, - - - -	1,427	0	0
Proceeds of Indian Journal and Illustrated Journal of Arts contributed towards the School, - - - - - - - -	4,812	0	0
Payments by me on account of School from my own Pay, - - - - - -	2,196	7	4
By Sales of pottery, &c &c., - - -	808	14	4
Total expenditure, - -	14,258	5	8
Debt still due for publication of Indian Journal and Illustrated Journal of Arts, - -	1,106	3	4
Loss by bad debts on account of Journal, - -	570	0	0

No. of Copies given away 234.

Pupils supplied with the publications at half price.

In addition to the above sums about Rs. 460 have been earned by the masters and pupils for copies of pictures.*

Before closing this Report it may be as well to mention that the grant of Rupees 6,000 sanctioned by the Honorable the Court of Directors under certain conditions, has not yet been called for, as it is still considered very doubtful whether the School will soon be made a self supporting Institution. Efforts are now being strenuously made to raise sufficient funds for this purpose, and the following Letter which has been printed in Tamil, Teloogoo, Hindustani and English is being extensively circulated through Madras. The Natives are responding liberally to the Appeal, and the sum of 2,000 has been subscribed by a few of them. It is also proposed to make an Appeal on behalf of the School to the public in India and Great Britain, copies of which will be forwarded to Government shortly. In the event of the sanction of the Honorable the Court of Directors being given for the expenditure of the Rupees 6,000 in the purchase of Studies, &c., steps will immediately be taken to procure them. Correspondence has already been entered into with the Presidents of the Royal Academies in London and Edinburgh, and with Artistic friends in Florence and Rome. Particulars of prices have already been procured from the two latter localities, and the following is a list of the studies which it is proposed to commence procuring for the School. The parties who are inclined to take up the industrial manufactures have already expended large sums in the purchase and erection of the necessary machinery, so that it is at present unnecessary to lay out the funds of the School in that way.

See Copy of Letter noticed in the Minutes of Consultation dated 21st Dec. 1852.

See accompanying Letter, page 41.

Appeal now in progress and plan of a School of Industrial Arts given at page 43.

See list of casts, ornaments, statues, busts and pictures.

* This sum has not been entered amongst the School accounts, but the money has passed through my hands.

It is hoped that the increased encouragement which the Arts are receiving in India, may prove a sufficient guarantee for their more liberal support.

ALEX. HUNTER.

15*th July*, 1853.

List of Books and Studies, the property of the Madras School of Arts.

	Vols.
Repertory of Arts and Manufactures	17
Edinburgh Philosophical Journal	14
Quarterly Journal of Science, Literature and the Arts	8
The Quarterly Journal of Science, &c	1
Thomson's Elements of Chemistry	1
Mechanics' Magazine	1
Brand's Journal of Science and the Arts	4
Florentine Gallery, large folio illustrated	6
Dr. Wight's Illustration of Indian Botany	2
Do. Figures of Indian Plants	4
The Ornamentist	1
Brongniart's Musee Ceramique	1
Do. Illustrations, finely colored	1
Elements of Art, by D. Harding	1
Explanatory Catalogue of Antique Gems, with 475 Copies *in Plaster*	1
Brongniart's Description of the Manufacture of Pottery and Porcelain	1
(Do Traité des Arts Ceramiques)	2
Plans of Machinery for do.	1
Select Specimen of Book and Newspaper Type Founts	1
History of Arts, by its Monuments, large folio illustrated	2
Designs for Shop Fronts and Door Cases	1
The Worcester Encaustic Tiles	1
36 Studies (Landscape) " les Oeuvres de Calame"	
6 Do. by Gingembre.	
8 Do. with Figures Les Elemens du Genrie.	
15 Do. Cours de Paysage, by Jacottet.	
3 Do. do. do. by J. Hubert.	

6 Studies by Ferogio, Papier tinté.
1 Do. by Hurbert, do. do.
8 Do. Horses, by V. Adam.
5 Do. Landscapes, by Calame.
22 Cours de dessin, Figures, by Ferogio.
14 Do. d'Architecture.
19 Sheets Colored Bouquets of Flowers.
32 Studies Cours des Ornemens.
Drawing Copies for Elementary Instruction, 2 Sets.
Lineal Drawing Copies, 2 Sets.

List of Statuettes and Casts, the property of the School.

PLASTER FIGURES.

Farnese Hercules.
Discobolus.
Dying Gladiator.
Dead Christ.
Suppliant Youth.
Dancing Faun.
Venus at the Bath.
Antinous.
Fighting Gladiator.
Apollo Belvidere.
Venus of Milo.
Group Laocoon.
Apollino (Torso.)
Diana of Gabia.
Venus de Medicis.
Forso of a Youth.
1 Mask, St. Jerome.
1 Do. Daughter of Niobe.
5 Casts of Animals.
24 Casts Hands and Feet.
Greek Slave.
Ariadne and the Panther.
Una and the Lion.
Madonna and Child.
Canova's three Graces.
Bacchus and Ariadne.
Bailey's Eve.
Grecian Girl.
Flora.
Neapolitan.
Fisherman Dancing.
Indian Girl Dancing.
Girl Surprised Bathing.
An English Bull.
Two Horses.
Two Dogs.
A Stag browsing.
A Red Deer.
11 Ornamental Brackets.
3 Statuettes in Parian.

Cost of above, Rs. 393.

List of Casts of Ornaments, Statue Busts and Copies of Pictures, proposed to be purchased for the Madras School of Industrial Arts.

PICTURES FROM THE COLLECTION OF SIR JAS. ERSKINE, BARONET, NEW NATIONAL GALLERY, EDINBURGH.

Nos.		*Artists' Names.*
1.	Woodland Scene	Rembrandt.
2.	Woodland Scene	Hobbima.
6.	Landscape, with mounted figures	Jan Both.
7.	Lady presenting Flowers to the Infant Saviour, seated on the knee of the Virgin	Titian.
8.	Halt of Horseman	Karel du Jardin.
10.	A Wood Scene	Jacob Ruysdael.
12.	A Thick Wood	Domenichino.
13.	Recesses of a Forest	Adam Pynaker.
14.	Dead Christ Magdalen and Angels	Procacini.
18.	A Flemish View—a small copy	Jacob Ruysdael.
21.	Cattle and Herdsman	Adrian Vandervelde.
22.	Woody Landscape	Hobbima.
25.	Physician and his Patient	Jan Steen.
26.	Landscape with Figures	Jan Both.
27.	Small Landscape with Figures	School of Berghem.
28.	Italian Landscape	Richard Wilson.
30.	Lake Scene with Bandits	Salvator Rosa.
31.	Sea Piece	Unknown.
34.	Landscape with Cattle and Female Figure	Andrian Vandervelde.
35.	Fishing Boats in a calm	William Vandervelde.
36.	Halt of a Waggon	Jan Linglebach.
37.	Cattle and Herdboy under Trees	Nicholas Berghem.
38.	Peasants Playing at Skittles	David Teniers.
39.	Battle Piece with Skirmish of Cavalry	Borgognone.
40.	A Farrier's Shop	Karel du Jardin.
41.	A Land Storm	Gaspar Poussin.
44.	Return of Small Craft into Harbour	Ludolf Backhuysen.

PICTURES FORMERLY IN THE TRUSTEES' ACADEMY,

	Artists' Names.
Family Portraits of Nobleman, his Lady and two Children, wanted a small copy, 3 or 4 feet.....	By Vandyke.
Single Portrait in Armour, wanted a small copy, 3 or 4 feet.....	Vandyke.
Also the Head and Shoulders, copied the size of the original.....	
Portrait in Armour.....	School of Vandyke.
Portrait in a Dark Dress.....	School of Titian.
Woman Interceding for the Vanquished, small copy, 3 or 4 feet.....	W. Etty.
Judith in the Tent of Holofernes, centre picture, small copy, 3 or 4 feet....	W. Etty.
Battle Piece.....	Borgognoni.

Interior of a Cathedral, a large picture,—Name forgotten, no Catalogue.

CASTS AND PICTURES FROM FLORENCE.

Busts.—Socrates, Plato, Aristotle, Caligula, Vespasian, Brutus, Cicero, Seneca, Marcus Aurelius, Hippocrates, Æsculapius, Homer, Periander, Colossal heads of Jupiter, Minerva, Hercules, and Juno, Sophocles, Pericles, Diogenes, Tiberius, Demosthenes, Nero, Trajan, Hadrian, Sabina, Antoninus Pius, Lucius Verus, Septimus Severus, Caracalla, Plautilla, and a few other Casts of hands and feet one of each. Good Anatomical studies—Medallions—Alto and Basso Relievos, Scrolls and Vases—a few of each—and the following Statues of 3 feet—Boy with a mask seated, Boy Strangling a Goose, Canova's Hebe, and 2 Dancing Girls, the Crouching Venus—Boy playing with a Kid, one or two small Statues.

PICTURES AND PORTRAITS FROM THE ROYAL GALLERY.

Titian, Raphael, Michael Angelo, Parmegiano, Jacopa da Ponte or (Bassano) Zucchero. Rubens (in dark hat), Velasquez. Vandyke, Rembrandt, Jacopo Cortesi or (Borgognoni,) and Salvator Rosa.

and from the Pitti Palace, wanted copies of the Sculptor Sansovino by Titian, Admiral Venerio by Tintoret, Princess Elionora Gonzaga by Titian, Pope Julius 2d by Raphael, Hypolite de Medicis by Pantormo, and one or two good pictures by any of the following. Holy family or female Portraits by Raphael, Leonardo da Vinci, Corregio, or Carlo Dolci and a good picture by any of the following Artists.—Guido, Giorgione, Paul Veronese, Froncesco Mola, or a Landscape with figures by Salvator Rosa, Domenichino, Nicholas or Gaspar Poussin.

PAINTINGS IN THE NATIONAL GALLERY, LONDON.

Nos.		*Artists.*
204.	Dutch Shipping	Backhuysen.
71.	Landscape with Muleteers	Jan Both.
127.	View in Venice	Canaletti.
210.	View of the Church, Campanile, and Piazza of St. Marco	Do.
94.	Pan Teaching Apollo to Play on the Pipes	Annibale Caracci.
58.	Landscape with Goat Herd and Goats	Claude.
61.	Landscape with Figures	Claude.
130.	The Corn Field	Constable.
23.	The Holy Family	Corregio.
53.	Landscape with Cattle and Figures—Evening	Cuyp.
48.	Landscape with Figures	Dominichino.
80.	The Market Cart	Gainsborough.
109.	The Watering Place	Do.
129.	Portrait of John J. Angersteen	Sir Thomas Lawrence.
144.	Portrait of Benjamin West, Head and Shoulders, 25 in by 30	Do.
188.	Portrait of Mrs. Siddons, a small copy, 2½ feet	Do.
153.	The Cradle	Nicholas Maas.
159.	The Dutch Housewife	Do.
176.	St. John and the Lamb	Murillo.
74.	A Spanish Peasant	Do.

Nos.		*Artists.*
36.	A Land Storm.....	Gaspar Poussin.
31.	A Landscape with Figures.....	Do.
68.	A Woody Landscape—Evening.....	Do.
27.	Portrait of Julius II.....	Raphael.
54.	Woman Standing in a Brook.....	Rembrandt.
51.	Portrait of a Jew Merchant.....	Do.
190.	A Jewish Rabbi.....	Do.
107.	The Banished Lord.....	Sir Joshua Reynolds.
162.	The Infant Samuel.....	Do.
84.	Landscape with Mercury and the Dishonest Woodman.....	Salvator Rosa.
155.	The Misers.....	David Teniers Jun.
4.	A Holy Family.....	Titian.
32.	Ganymede and the Eagle.....	Do.
149.	A Calm at Sea.....	William Vandervelde.
150.	A Fresh Gale at Sea.....	Do.
49.	Portrait of Rubens.....	Vandyke.
52.	Portrait of Gevartins.....	Do.

ALEX. HUNTER.

It is proposed to expend the Rs. 6,000 in purchasing good Copies of the above Studies as far as the money will go.

CIRCULAR LETTER REGARDING THE SCHOOL OF INDUSRIAL ARTS.

Printed in Tamil, Teloogoo, Hindostanee and English.

It is proposed to extend the operations of the MADRAS SCHOOL OF ARTS, and to introduce such branches of practical instruction, as shall be most likely to prove remunerative to the Pupils, after they leave the establishment. The fee for admission will also be reduced to four Annas per month for each pupil. The Honorable the Court of Directors have offered to assist the Institution with funds, and with properly qualified European Instructors on the same conditions as are granted to the Schools of Design in Great Britian, viz., that the public shall show a willingness to assist in supporting the School.

Four hundred and seventy-two East Indian and Native Pupils have already received instruction in the Madras School of Arts, and many of them are now able to earn a livelihood; or to contribute towards the support of their families by their proficiency in drawing. A number of teachers and monitors have been carefully trained to superintend the rudimentary instructions in Drawing, Painting, Lithography and Engraving. A few are also qualified to impart instruction in Pottery, the manufacture of good building materials and the uses of Plaster of Paris for house decorations. Should more instructors be required, they will be selected from the most proficient of the Pupils. A large Artistic Library and a progressive series of Studies in the different branches of Art and Manufacture, have already been purchased for the School; funds are however requisite for renting or erecting an appropriate building, and it is proposed to commence a Subscription in Madras and throughout the Presidency for this object. Parties have already shown a willingness to contribute, and the smallest sum will be most thankfully received.

Instructions will be given in the following branches of Art and Industry:—*Drawing—Painting—Lithography—Wood Engraving*—and if possible *Printing—Pottery*, and the manufacture of the building materials required for the School, and the uses of Plaster of Paris in decoration.

ALEX. HUNTER.

FROM

THE COMMITTEE OF THE

SCHOOL OF INDUSTRIAL ARTS,

Madras.

To

SIR H. C. MONTGOMERY, BART.,

Chief Secretary to Government.

SIR,

1. We have the honor to forward the Third Annual Report upon the Madras School of Industrial Arts, prepared by Dr. Hunter, and would feel obliged by your submitting it to the Honorable the Governor in Council.

2. There are a few points connected with the Report to which we would beg to draw attention ;

First. The number of Pupils who have been under instruction and the lucrative situations which several of them have obtained from their proficiency in the Arts.

Secondly. The public interest which has been excited in favor of the Arts, Manufactures and Raw Products of the country, and the influence which a well organized School of Industry would exert in the development and application of these resources.

Thirdly. The amount realized by the sale of the Illustrated Journal, and of the Pottery which indicates appreciation on the part of the Public of the operations of this Institution.

3. We would beg at the same time to point out the difficulties which the School has had to contend with in consequence of Dr. Hunter being necessarily much occupied with his professional duties. Although by no means discouraged at the results of the School, considering the circumstances in which it has been placed, we would most earnestly represent that it is impossible the Institution should adequately fulfil the purpose of its establishment unless it be placed under the management of a competent Superintendent exclusively devoted to it. We therefore deeply regret that the Honorable the Court of Directors have not acceded to the request that Dr. Hunter should be relieved from Medical duties and allowed to devote his services to this work. We venture to renew this request, and we beg to suggest that this School being in truth a part of the educational appliances of the country might be fairly deemed entitled to a share of the funds set apart for education, so that the contribution of the Government to its support would not form a new or additional charge, and in urging the claim of this School to the liberal support of the Government, we beg to notice the fact that in all the coun-

tries of Europe, most distinguished for ingenuity and industry, Schools of Art in connection with and as auxiliary to manufactures have been established within comparatively recent times; and in almost all instances they receive the liberal and enlightened aid of the respective Governments. Further, we are constrained to express our fears, that unless the arrangement in para. 9 of our former Letter can be effected, the closing of the School will become inevitable.

4. In renewing our application for Dr. Hunter's services, we beg also to repeat the request contained in para. 10 of our former Letter—we would direct the attention of Governvernment to the important fact there alluded to, that unless the services of a skilled glazed fireman and of an artist capable of teaching copper plate or wood engraving, can be secured for the School, those parts of its labours which promised to be the most successful cannot be brought to perfection.

5. We are authorized to state that Dr. Hunter is now engaged in drawing up a scheme, estimate, and plans for a School of Industrial Arts suited for the wants of Madras. That the Natives are responding liberally to the Appeal made in behalf of the School, and that printed copies of a similar Appeal to the Honorable the Court of Directors and the public in Great Britain and India will probably be submitted to Government next month, along with a large folio volume of Native patterns, many of which are well adapted for application to the most tasteful arts and manufactures.

6. In conclusion we think it right again to explain our views as to the true province and design of this Institution, with reference to the remarks of the Honorable the Court of Directors as to the prospect of the Schools becoming eventually independent of Government aid, a point which they consider indispensable. We submit that the great object to be

aimed at, and to which other Institutions of the same character are directed, is not the effecting of such profits as to render them remunerative, but by showing the feasibility of various projects to open up a way into which private capital may be profitably diverted—like the Institutions in Europe above alluded to, their province is not commerce but science, though only such science is pursued as is calculated to promote commerce—while therefore we see no reason to doubt that sufficient remunerative work would be accomplished to meet in part the pecuniary liabilities of these Institutions,we do not expect, nor would it be consistent with their character and design to expect, that they will prove so far remunerative as to become independent of extraneous support. To repeat the concluding observations of our former letter, we do not anticipate that these Institutions will be themselves money-making establishments, but we do anticipate that they will show how money is to be made. The legitimate province of these Schools will be in the first place to experimentalize; and then when the experiment has succeeded, not to monopolize the manufacture so produced, but leaving it to be taken up by private capital and private enterprize, to pass on to some other branch of manufacture. In a word, we regard these Institutions as likely to become useful pioneers, pointing out the road to various fields of remunerative labour, clearing away the obstacles that obstruct it, and, by leading the way, encouraging a class, too prone to regard handicraft occupations as degrading, to enter upon a sphere of honorable, manly, useful, and profitable exertion.

We have the honor to be,

Sir,

Your most obedient Servants,

(Signed) W. A. MOREHEAD,

and other Members of the Committee.

SCHOOL OF DESIGN PROPOSED TO BE ESTABLISHED IN MADRAS.

1. As it is of consequence that the interest which has been excited in Madras in favor of the Arts should not be allowed to drop, it is proposed that the following arrangements be immediately made for the purpose of organizing a School in which the principles of Design and the applications of the Arts to some useful and ornamental purposes, shall be thoroughly taught.

Interest in favor of the Arts must not be allowed to drop.

2. Sufficient progress has already been made by the Masters and some of the advanced pupils in the School of Industrial Arts, to enable them to impart instruction in several rudimentary branches which may hereafter be brought to perfection by procuring the assistance of qualified instructors from Europe.

Masters and a few pupils qualified to impart rudimentary instruction.

3. The following are the branches of instruction which might be commenced immediately.

ARTISTIC INSTRUCTION.

Artistic Instruction.

Elementary and Geometrical Drawing.
Drawing from the flat and copying.
Drawing from the round, shading and perspective.
Lithographic and transfer drawing.
Etching and Rudiments of Engraving on copper.
Rudimentary wood engraving.

INDUSTRIAL INSTRUCTION.

Industrial Instruction.

Carpentry and joiners' work.
Carving in wood and Model making.
Modelling in clay and Moulding in sand.
Casting in Plaster of Paris and Keene's Cement.
Manufacture of Bricks, Tiles and draining Pipes.
Pottery and manufacture of Quarries or paving Tiles.

4. The following is the proposed distribution of the instructions in the Artistic Department, an East Indian and a Native Teacher being attached to each class.

Teachers.

First Class. For Elementary and Geometrical drawing.
Teachers.—Mr. W. Johns and Rajahgopaul.

Second Class. For Drawing from the flat and copying.
Teachers.—Mr. R. H. Dupuy and C. Moorgasen.

Third Class. For Drawing from the round, shading and perspective.
Teachers.—Mr. J. Fonçeca and Balakistnah.

Fourth Class. For Lithographic and transfer drawing.
Teachers.—Mr. A. Barren and P. Moorgasen.

Fifth Class. For Etching and copper plate engraving.
Teachers.—Mr. Just Gantz and Chengulvaroy.

Sixth Class. For wood engraving.
Teachers.—Mr. J. Duarte and P. Soondrum.

INDUSTRIAL DEPARTMENT.

First Class. For Carpentry and joiners' work.
Teachers.—A good pupil from Major Maitland's School and Native carpenter, Arnachellum.

Second Class. For Carving in wood and Model making.
Teachers.—An European or East Indian carver and Native carver, Chokalingum Achary.

Third Class. For Modelling in Clay and Moulding in wax, sand, &c.
Teachers.—Alexander Hunter, and a Native potter or plasterer.

Fourth Class. For Casting in Plaster of Paris and Keene's Cement.
Teacher.—Mr. W. H. Gabell.

Fifth Class. For manufacture of Bricks, Tiles and draining Pipes.
Teachers.—Mr. T. Barton, or R. Friminger.

Sixth Class. For Pottery and the manufacture of Quarries or paving Tiles.
Teachers.—Mr. M. Chesterfield and Tandavaroy.

It is proposed that the pupils in the Industrial Department be employed in making the bricks, tiles, carpentry and wood work, required for the New School—see ground plans, and elevation of proposed School. (Sent to Government.) It is estimated that such a building could not be erected in Madras even with the assistance of the labor of the pupils for less than 80,000 Rs. A large collection of Elementary Studies has already been purchased for the above classes, and arrangements are being made for procuring more advanced lessons.

The Funds required for the Teachers in the Artistic Departments will probably amount to Rs. 300 monthly.

Those for the Industrial Department to Rs. 200 monthly.

For Servants, Raw Materials, &c., Rs. 100 monthly.

ALEX. HUNTER.

MADRAS,
28th July 1853.

MEETINGS OF THE COMMITTEE WERE HELD

On the following days.

9th January 1851.
27th February 1851.
10th March 1851.
1st November 1851.
27th January 1852.
2nd March 1852.
4th May 1852.
4th January 1853.
26th July 1853.

The object of these Meetings was to devise plans for the best management of the School, to inspect the progress made by the pupils, and to prepare the accompanying Reports for submission to Government and subsequent publication.

COMMITTEE.

W. A. MOREHEAD, Esq.
J. D. BOURDILLON, Esq.
MAJOR COTTON.
MAJOR BALFOUR.
EDWARD ELLIOT, Esq.
MAJOR SMITH.
REV. A. R. SYMONDS.
EDWARD BALFOUR, Esq.